

English Translation of Amendments to claims:

Please amend the claims as indicated below:

1. (Currently Amended) A method for programming a one time
5 programmable memory (200, 310, 400, 500, 600), wherein the improvement
comprises ~~comprising~~ the steps of:
obtaining an array (200) of transistors (210, 310, 400, 500, 600); and
programming at least one of said transistors using a hot carrier
transistor aging technique to alter a characteristic of said at least one of said transistor.
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2. (Original) The method of claim 1, wherein said programming step
further comprises the step of applying a stressful voltage to said at least one of said
transistors to cause said hot carrier transistor aging.
- 15 3. (Original) The method of claim 1, wherein said altered characteristic is
a change in a threshold voltage of said at least one of said transistors.
4. (Currently Amended) The method of claim 3, wherein said
programming step further comprising the step of applying a stressful voltage to a
20 drain (440) and a gate (470) of said at least one of said transistors to cause said
change in said threshold voltage of said ~~of said~~ at least one of said transistors.
5. (Original) The method of claim 3, further comprising the step of
detecting said programmed at least one of said transistors by sensing said change in
25 said threshold voltage of said at least one of said transistors.
6. (Original) The method of claim 5, wherein said detecting step further
comprises the steps of raising a source terminal for each of said array of transistors to
a positive potential; raising a gate terminal for all transistors along a selected row to a
30 positive potential and detecting whether a drain voltage changes from a precharge
voltage level to approximately a cell transistor threshold voltage below said positive
gate terminal potential.

7. (Original) The method of claim 1, wherein said altered characteristic is a change in a saturation current of said at least one of said transistors.

8. (Currently Amended) The method of claim 7, wherein said programming step further comprising the step of applying a stressful voltage to a source and a gate of said at least one of said transistors to cause said change in said saturation current of said ~~of said~~ at least one of said transistors.

9. (Original) The method of claim 7, further comprising the step of detecting said programmed at least one of said transistors by sensing said change in said saturation current of said at least one of said transistors.

10. (Original) The method of claim 7, wherein said detecting step further comprises the steps of raising the voltage on at least one column in said array of transistors to a positive potential; raising a gate terminal of each transistor in a selected row to a positive potential and evaluating a rate of voltage decay of at least one column in said array of transistors.

11. (Currently Amended) A one time programmable memory, wherein the improvement comprises ~~comprising~~
an array of transistors, wherein at least one of said transistors is programmed using hot carrier transistor aging to alter a characteristic of said at least one of said transistor; and
a circuit for sensing said altered characteristic of said at least one of said transistor.

12. (Original) The one time programmable memory of claim 11, wherein said at least one of said transistors is programmed by applying a stressful voltage to said at least one of said transistors to cause said hot carrier transistor aging.

13. (Original) The one time programmable memory of claim 11, wherein said altered characteristic is a change in a threshold voltage of said at least one of said transistors.

14. (Original) The one time programmable memory of claim 13, wherein said at least one of said transistors is programmed by applying a stressful voltage to a drain and a gate of said at least one of said transistors to cause said change in said threshold voltage of said of said at least one of said transistors.

15. (Original) The one time programmable memory of claim 13, wherein said circuit senses said change in said threshold voltage of said at least one of said transistors.

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16. (Original) The one time programmable memory of claim 15, wherein said circuit raises a source terminal for each of said array of transistors to a positive potential; raises a gate terminal for all transistors along a selected row to a positive potential and detects whether a drain voltage changes from a precharge voltage level to approximately a cell transistor threshold voltage below said positive gate potential.

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17. (Original) The one time programmable memory of claim 11, wherein said altered characteristic is a change in a saturation current of said at least one of said transistors.

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18. (Original) The one time programmable memory of claim 17, wherein said at least one of said transistors is programmed by applying a stressful voltage to a source and a gate of said at least one of said transistors to cause said change in said saturation current of said of said at least one of said transistors.

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19. (Original) The one time programmable memory of claim 17, wherein said circuit senses said change in said saturation current of said at least one of said transistors.

20. (Original) The one time programmable memory of claim 17, wherein said circuit raises a voltage on at least one column in said array of transistors to a positive potential; raises a gate terminal of each transistor in a selected row to a

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positive potential and evaluates a rate of voltage decay of at least one column in said array of transistors.

21. (Currently Amended) A one time programmable memory element,
5 wherein the improvement comprises ~~comprising~~

at least one transistor that is programmed using hot carrier transistor aging to alter a transistor characteristic; and

a circuit for sensing said altered characteristic of said transistor.

10 22. (Original) The one time programmable memory element of claim 21, wherein said altered characteristic is a change in a saturation current of said transistor.

23. (Original) The one time programmable memory element of claim 21, wherein said altered characteristic is a change in a threshold voltage of said transistor.

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24. (Currently Amended) A memory cell, comprising only one transistor, wherein the improvement of said transistor comprises:

a source region (450);

a drain region (440);

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a channel region (480);

one silicon-dioxide gate insulator layer (460); and

one gate electrode layer (470).

25 25. (Currently Amended) The memory cell of claim 24, wherein the memory cell ~~element~~ is a one time programmable memory element programmed using a hot carrier transistor aging technique to alter a characteristic of said transistor.

26. (Original) The memory cell of claim 24, further comprising a plurality of said memory cells arranged in an array of rows and columns.

27. (Currently Amended) An integrated circuit, wherein the improvement comprises comprising:

a one time programmable memory, comprising

an array of transistors, wherein at least one of said transistors is
5 programmed using hot carrier transistor aging to alter a characteristic of said at least one of said transistor; and

a circuit for sensing said altered characteristic of said at least one of said transistor.

10 28. (Original) The integrated circuit of claim 27, wherein said at least one of said transistors is programmed by applying a stressful voltage to said at least one of said transistors to cause said hot carrier transistor aging.

29. (Original) The integrated circuit of claim 27, wherein said altered
15 characteristic is a change in a threshold voltage of said at least one of said transistors.

30. (Original) The integrated circuit of claim 27, wherein said circuit senses said change in said threshold voltage of said at least one of said transistors.

20 31. (Original) The integrated circuit of claim 27, wherein said altered characteristic is a change in a saturation current of said at least one of said transistors.

As a result of this amendment:

The following claims are unchanged: 2-3, 5-7, 9-10, 12-20, 22-23, 26, and 28-31.

The following claims have been canceled: None.

5 The following claims are amended: 1, 4, 8, 11, 21, 24, 25, and 27.

The following claims are new: None.